From: <u>Curry, Tim</u>
To: <u>Martin, John</u>

Subject: RE: Oil on water classifier

**Date:** Tuesday, April 09, 2019 8:35:00 AM

Red areas on the water are being classified as oil on top. The results need ground truthing and then the classifier algorithm could be optimized some more. The Phd's at the university would be able to do that if they know the ground truth. My interpretation is that the classifier from the Gulf Oil spill didn't account for land surfaces. At the Gulf spill it was much easier to make a classifier that worked just for a water background. Another approach we could take is to try to mask the land surface before running the classifier and see what results we get.

We just haven't developed this detection approach much since the Gulf Oil spill. It may be time to put some effort into it.

From: Martin, John

**Sent:** Tuesday, April 09, 2019 8:26 AM **To:** Curry, Tim <Curry.Timothy@epa.gov>

Subject: RE: Oil on water classifier

Looks cool. Are some of the red areas sort of the oil areas? I'll call you later today. thanks



From: Curry, Tim

Sent: Tuesday, April 09, 2019 7:39 AMTo: Martin, John <martin.john@epa.gov>Cc: robert.kroutil@kalmancoinc.comSubject: Oil on water classifier

John,

We processed the line scanner image with the old Gulf Oil spill classifier. I have attached the google earth image for the run over the confluence and harbor from yesterday. After you get a chance to look at this give me a call to discuss. Obviously we never classified out the shoreline and there was a strong sun reflection during this collect as can be seen in the aerial photos. The classifier clearly is not optimized for the land/shore scene we have at ITC but when you just look at just the water portions in the scene it appears to be generally correct.

Timothy Curry, PE EPA OLEM/OEM/CMAD/FOB

11201 Renner Blvd. Lenexa, Ks. 66219 Office Phone (913)551-5129 Cell Phone (816)718-4281